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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/411,936	10/04/1999	CHARLES P. BARBER	283P263	9016

20874 7590 10/07/2002  
WALL MARJAMA & BILINSKI  
101 SOUTH SALINA STREET  
SUITE 400  
SYRACUSE, NY 13202

EXAMINER

FRECH, KARL D

ART UNIT	PAPER NUMBER
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2876

DATE MAILED: 10/07/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/411,936

Applicant(s)

BARBER ET AL.

Examiner

Karl D Frech

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 July 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-19 and 39-74 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-19 and 39-74 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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1. The amendment received July 5, 2002 has been entered as paper number 11.
2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1,3-19,39-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Hagan et al in,, view of well known prior art. As seen in the previous rejection, O'Hagan discloses in figure 4 as described in column 6 line 20 - column 7 line 27, a scanning mechanism including a two dimensional photo sensing array 170 mounted on a circuit board 146. Also disclosed are illumination means 44 including LED's 180, targeting LED's 188, 186 mounted on circuit board 146 which project targeting beams through an aperture in board 189. There is disclosed an image processor 120 mounted on the circuit board. As seen in the figure, the entire circuit board apparatus is enclosed and mounted within a housing including back and side -walls

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162. O'Hagan discloses that his elements are mounted on four circuit boards, not a single circuit board as claimed when interpreted in light of applicants disclosure (and remarks of 7/5/02).

However rearrangement of parts, mounting multiple elements on a single circuit board is old and well known. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to mount all the elements of O'Hagan on a single circuit board in order to accommodate for alternate packaging and housing details dictated by the environment in which the apparatus is to be used. O'Hagan does not disclose the specific housing details as claimed or the "finger" mounting as claimed. Mounting "fingers" are old and well known, as are "recesses" and alignment means in electronic equipment enclosing circuit boards. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to mount the board of O'Hagan using mounting "fingers" and to provide "recesses" for alignment in the housing of "O'Hagan". This would be a matter of design choice, possibly chosen for a more economically and efficiently packaged scanning system.

4. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection. Applicant's arguments center around the elements being mounted to a single circuit board. The claim language as initially rejected, and as now recited does not limit all elements being mounted on a single circuit board. The open ended "comprising" is used. The O'Hagan does disclose four circuit boards, which includes one circuit board. All of O'Hagan's circuit boards are physically and electronically connected, and the appropriate elements are mounted on at least one of these four circuit boards. However, in light of applicant's arguments which now

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suggest that all elements are mounted on a single circuit board, and since this all elements on one circuit board is supported by the specification, the examiner now interprets that all the claimed elements are mounted to a single circuit board. Since the examiner can understand how the examiner's rejection as presented against the claims may not be completely clear, this action will not be made final in order to allow applicant adequate opportunity to respond. Any inconvenience is regretted.

The applicant argues that design choice is no longer a valid reason for obviousness. Although the examiner may agree that "carte blanche" design choice reasoning may be weak, the examiner points out that there was specific reasoning why one would choose this design choice provided in the rejection, therefore supporting and fulfilling the examiner's requirement to provide adequate reasoning for combination. In support of the holding of Official Notice, the examiner provides Brefka 4,092,698, column 2 lines 31-33 and applicant has provided Feng et al 5,793,033, column 8 lines 52-56.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl Frech whose telephone number is (703) 305-3491. The examiner's supervisor is Michael Lee whose telephone number is (703)305-3503. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Tech Center receptionist whose telephone number is (703)308-0956. The Tech Center fax number is (703) 308-7722.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [karl.frech@uspto.gov]. All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C.

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122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

A handwritten signature in black ink, appearing to read 'Karl D. Frech', with a stylized, flowing script.

Karl D. Frech  
Primary Examiner, AU 2876  
October 01, 2002